

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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CERTIFIED MAIL RETURN RECEIPT REQUESTED

September 28, 2006

Philip L. Sussler, Esq. General Counsel, Connecticut Municipal Electric Energy Cooperative 30 Stott Avenue Norwich, CT 06360

RE: **PETITION NO.** 778 – Connecticut Municipal Electric Energy Cooperative (CMEEC) petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed repowering of the Alfred L. Pierce Generating Station located at 195 East Street, Wallingford, Connecticut.

Dear Mr. Sussler:

At a public meeting held on September 28, 2006, the Connecticut Siting Council (Council) considered and ruled that the repowering of the Alfred L. Pierce Generating Station would not have a substantial adverse environmental effect, and pursuant to General Statutes § 16-50k would not require a Certificate of Environmental Compatibility and Public Need.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the record of this proceeding.

Enclosed for your information is a copy of the staff report on this project.

Daniel F. Caruso

Chairman

DFC/CML

Enclosure: Staff Report dated September 28, 2006

c: Honorable William W. Dickinson, Mayor, Town of Wallingford Linda Bush, Town Planner, Town of Wallingford Gabe Stern, CMEEC



Date: September 1, 2006

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LIST OF PARTIES AND INTERVENORS $\underline{\text{SERVICE LIST}}$

Status Holder	Representative
(name, address & phone number)	(name, address & phone number)
Connecticut Municipal Electric Energy Cooperative (CMEEC)	Gabriel B. Stern Director, Planning and Development CMEEC 30 Stott Avenue Norwich, CT 06360-1526 (860) 889-4088 (860) 889-8158 fax gstern@cmeec.org Philip L. Sussler, Esq. General Counsel CMEEC 30 Stott Avenue Norwich, CT 06360 (860) 889-4088 (860) 889-8158 fax psussler@cmeec.org Town of Wallingford Department of Public Utilities Electrical Division 100 John Street Wallingford, CT 06492 (203) 294-2265 (203) 294-2267 fax rfs100@sbcglobal.net
	(name, address & phone number) Connecticut Municipal Electric

Petition No. 778 Connecticut Municipal Electric Energy Cooperative Wallingford, CT Staff Report September 28, 2006

On July 11, 2006, Connecticut Municipal Electric Energy Cooperative (CMEEC) submitted a petition (Petition) to the Connecticut Siting Council (Council) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed repowering of the Alfred L. Pierce Generating Station in Wallingford, Connecticut. On August 22, 2006, Council members Philip T. Ashton and Brian Emerick and Christina Lepage of Council staff met with CMEEC representatives at the former Alfred L. Pierce Generating Station.

CMEEC is a non-profit municipal joint action electric agency, which provides the power supply requirements for six municipal electric department participants with retail service territories in Connecticut. The Wallingford Department of Public Utilities Electric Division (WED) is a participant in CMEEC and would purchase approximately one-third of the output of the proposed project.

On September 21, 2006, the Council held a public meeting, after giving due notice, beginning at 4:00 p.m. and continuing at 7:00 p.m. in the Robert Earley Auditorium of the Wallingford town Hall, 45 South Main Street, Wallingford, Connecticut. The Council held a public field review of the proposed site at 3:00 p.m. on September 21, 2006.

The Council received comments from the State of Connecticut Department of Environmental Protection (DEP) on September 14, 2006. The DEP recognizes the need for additional generation within the southwest Connecticut (SWCT) sub-area electric market and supports the reuse of existing electric generating sites. Furthermore, the DEP Bureau of Air Management has received an application from CMEEC for a New Source Review Permit for the proposed generating station. The application for the DEP permit is under review and a Notice of Tentative Determination is expected to be released in November.

The proposed project would serve the capacity needs of WED and the five other municipal electric systems that purchase power through CMEEC. Statewide CMEEC serves 400 MW of peak loads, which translates to a need for approximately 450 MW of capacity under ISO-New England rules. The proposed project would provide a portion of those capacity requirements. At current load levels, CMEEC requires approximately 63 MW of locational forward reserve capacity.

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CMEEC intends to qualify as a quick start peaking generation plant to participate in the locational forward reserve market (LFRM) proposed by the Independent System Operator-New England (ISO-NE). CMEEC proposes to complete the installation of the proposed facility by early summer of 2007 and begin commercial operation of the plant on or before August 1, 2007. The proposed schedule would allow the peaking plant to participate in the LFRM for the 2007/2008 winter season auction, which begins on August 1, 2007 and requires that the plant be fully available by October 1, 2007.

The LFRM requires that the plant be available to operate Monday through Friday from 8:00 a.m. to 11:00 p.m.

CMEEC proposes to construct and operate a single unit combustion turbine with average electrical output of approximately 84 MW, which would be interconnected to the existing Wallingford East Street Substation via underground 115kV cable. The proposed unit would be fueled by natural gas from an existing Algonquin Gas Pipeline Company lateral spur and a new 24 hour backup oil storage tank, which would contain at least 200,000 gallons of oil, would be located on adjacent Town of Wallingford property that contains Wallingford Electric Department buildings and three CMEEC distributed generation (DG) units.

The proposed equipment would be stored and remediated on an adjacent parcel to the north of the site.

Oil truck deliveries to the fueling area on John Street are expected to be approximately 150 deliveries per year assuming the maximum amount of oil is used during operation of the plant (approximately 175 hours per year).

The Pierce Generating Station was commissioned as a 22.5 MW coal fired power plant in 1953. The plant was decommissioned in July of 2000. The building is a steel and cast-in-place concrete construction with brick facing on three sites and concrete block on the rear side. Following the decommissioning of the power plant the original boilers, stack, cooling towers, oil tanks, piping and electrical infrastructure were removed, leaving only the building shell interior rooms and minor electrical switchgear in place. The existing building would be retained and incorporated into the configuration of the proposed project.

The site is within an Industrial (I-40) zoning district, which is immediately adjacent to the PPL Wallingford Energy LLC 250 MW peaking plant (Petition 451). A residential district and residential homes are located to the east of the site along on East Street, directly across the street from the site.

The Town of Wallingford has agreed to lease the property to CMEEC for the construction and operation of the proposed project. WED and the Town of Wallingford have approved WED's participation in the proposed project.

A gas regulation and metering enclosure would be constructed approximately 150 feet to the south of the southeast corner of the Pierce building. The enclosure would be approximately 30 feet long by 12 feet wide by nine feet high and have a brick front to match the Pierce building. Visibility of the proposed enclosure would be reduced from East Street by the existing berm and landscaping. CMEEC also proposes additional landscaping.

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The existing building would require building modifications and reinforcements to accommodate the proposed equipment. The proposed turbine would be located at ground level and oriented approximately on a north-south centerline with the generator end of the unit facing south. CMEEC would construct a 125 foot painted steel exhaust stack behind the back of the existing building on a new foundation. The proposed stack would be shielded from East Street by the existing building for the first 90 feet of its height.

The air-intake would be on the north side of the building and would extend approximately 25 feet into the current parking lot. A sound wall would be constructed around the air-intake equipment from the front side of the building approximately 15 feet, then extending northward approximately 50 feet and to the west approximately 50 feet with a height of 50 feet. The sound wall would match the current brick and other architectural features of the existing building.

The transformer would step up the power from the generator output of 13.8 kV to 115 kV and provide the power to the existing WED East Street substation. The transformer would be located outside of the building on the southwest corner of the property, and will be screened from view in all directions.

The proposed plant would have the added capability of providing power directly to the Wallingford substation, which would then be distributed to the Town of Wallingford, in the event of a power outage.

CMEEC proposes that the dual-fueled peaking plant have quick-start capability. The plant would have the ability to synchronize to the grid and begin generating power at full output within 30 minutes of starting. Connecticut is currently in need of this type of generation to maintain the reliability of the electric system.

The proposed project would operate no more than 500 hours per year and would likely operate on average approximately 200 hours per year. Operation would occur year-round during extreme hot and extreme cold weather conditions and during major operating system disturbances and scheduled maintenance periods. The actual number of hours that the plant would operate would depend on the ISO dispatch of the plant.

The proposed project would meet all state air emission regulations. CMEEC would apply to the DEP for a new source review air emissions permit. CMEEC's application proposes to restrict emissions from the proposed project of any pollutant to below 15 tons per year (TPY) so as to not constitute a major emitting source, which would require Best Available Control Technology (BACT) offsets.

The proposed project would not use water when operating on natural gas. CMEEC proposes an evaporative cooler, which would be used during hot, low humidity days and would consume approximately 8,600 gallons of water per hour at full operation. The proposed plant would be fueled by oil primarily during the winter months, when natural gas supply may be interrupted, approximately 50 to 150 hours per year. Oil operation could use approximately 6,500 gallons of water per hour.

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If the plant were to operate exclusively on distillate oil, it would reach 15 TPY of nitrogen oxides (a criteria pollutant) within 175 hours of operation without controls. If the plant were to operate exclusively on natural gas, it would reach 15 TPY of carbon monoxide (a criteria pollutant) within approximately 540 hours of operation without controls. CMEEC would use selective catalytic reduction (SCR) to control nitrogen oxide emissions in the future if the annual operating hours and fuel use increases. The plant would be designed with space for an SCR so that it could be easily added in the future.

In the event of an occurrence in which the plant was required to operate more than 500 hours, CMEEC would attempt to remain within air permit limits. To remain within the permit limits, CMEEC would install the SCR as soon as possible. If it were a sudden unanticipated emergency event, CMEEC would seek relief from permit constraints.

The plant would most likely be dispatched during power outages. No transmission constraints are expected in the area that would prevent the plant from serving loads or meet localized contingency needs.

There are no state or federally listed rare plants or animal species within the parcel or the surrounding area.

The most visible feature of the proposed project would be the proposed 125 foot stack. The proposed stack is approximately the same height and at the same location from 1955 through 2001.

Utilization of quick-start generation facilities would allow the system to rely less on existing, older and more polluting generating stations for reserve capability within Connecticut and especially southwest Connecticut. Older units create additional spinning reserves by operating in stand-by mode or partial loading in advance of potential dispatch.